

Please replace the heading beginning at page 17, line 16, with the following heading:

A21  
- DETAILED DESCRIPTION OF THE PREFERRED  
EMBODIMENTS -

IN THE CLAIMS:

Cancel non-elected claims 2 and 5-23 without prejudice or admission and subject to applicants' right to file a continuing application to pursue the subject matter of the non-elected claims.

Amend claims 1, 3 and 4 as follows:

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*Op 20 cont'd*

1. (Amended) An optical microcantilever for a scanning near field microscope, the optical microcantilever comprising:  
an optical waveguide having a light input/output end and a free end for propagating light incident from the light input/output end;  
a tip formed at the free end of the optical waveguide and having a microscopic aperture; and  
a reflecting member disposed at the free end of the optical waveguide and having a generally planar surface for reflecting light propagated from the light input/output end of the optical waveguide and for guiding the reflected light

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end

towards the microscopic aperture of the tip, or for reflecting light propagated from the microscopic aperture towards the light input/output end of the optical waveguide.

3. (Amended) An optical microcantilever according to claim 1; wherein at least part of the optical waveguide comprises a core and a cladding disposed on the core.

4. (Amended) An optical microcantilever according to claim 3; wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.

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Kindly add the following new claims 24-40:

24. An optical microcantilever according to claim 1; wherein the reflecting member comprises a mirror.

25. An optical microcantilever according to claim 24; wherein the entire mirror is generally planar.

26. An optical microcantilever according to claim 1; wherein the entire reflecting member is generally planar.

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*Sub B1*

27. An optical microcantilever according to claim 1; wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.

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28. An optical microcantilever according to claim 3; wherein the cladding surrounds the core.

29. An optical microcantilever according to claim 28; wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.

30. An optical microcantilever according to claim 3; wherein the core has two sides; and wherein the cladding is disposed on one of the two sides of the core.

31. An optical microcantilever according to claim 30; wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on

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*contd*

the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.

32. An optical microcantilever according to claim 3; wherein the core has two sides; and wherein the cladding is disposed on the two sides of the core.

33. An optical microcantilever according to claim 32; wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.

34. An optical microcantilever comprising:  
an optical waveguide for propagating light and having a tip portion formed at a free end of the optical waveguide, the tip portion having a microscopic aperture; and a reflecting member disposed at the free end of the optical waveguide and having a generally planar surface for reflecting light propagated by the optical waveguide and for guiding the reflected light towards the microscopic aperture to generate near-field light at the microscopic aperture.

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35. An optical microcantilever according to claim 34; wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.

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36. An optical microcantilever according to claim 35; wherein the reflecting member forms part of the reflecting film.

37. An optical microcantilever according to claim 35; wherein the optical waveguide has a longitudinal axis, a first section extending in a direction generally parallel to the longitudinal axis, and a second section extending from the first section at a preselected angle relative to the longitudinal axis so that the light reflected by the reflecting member is guided towards the microscopic aperture to generate near-field light at the microscopic aperture.

38. An optical microcantilever according to claim 37; wherein the reflecting film is disposed on the first section of the optical waveguide and the reflecting member is disposed on the second section of the optical waveguide.

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39. An optical microcantilever according to claim 38; wherein the reflecting member forms part of the reflecting film.

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40. An optical microcantilever comprising: an optical waveguide for propagating light and having a longitudinal axis and a tip portion formed at a free end of the optical waveguide, the tip portion having a microscopic aperture; and

a reflecting film disposed on at least a portion of the optical waveguide, the reflecting film having a generally planar surface disposed proximate the free end of the optical waveguide at a preselected angle relative to the longitudinal axis for reflecting light propagated by the optical waveguide and for guiding the reflected light towards the microscopic aperture to generate near-field light at the microscopic aperture.

**IN THE DRAWINGS:**

Submitted herewith are copies of Figs. 12-14 on which have been marked in red proposed drawing revisions. Upon approval of the drawing revisions and allowance of the application, the formal drawings will be accordingly revised.

further patentably distinguish from the prior art of record. Claims 3 and 4 have been amended to overcome the objection noted by the Examiner. Claims 1, 3 and 4 have also been amended in formal respects to improve the wording thereof. New claims 28, 30 and 32 have been added to cover the alternative features in original claim 3 directed to the location of the cladding on the core of the optical waveguide. New claims 29, 31 and 33 have been added to cover the combinations recited in original claim 4/3. New claim 27 has been added to cover the feature of original claim 4/1. Claims 2 and 5-23 have been canceled without prejudice or admission and subject to applicants' right to file a continuing application to pursue the subject matter of the non-elected claims. New claims 34-40 have been added to provide a fuller scope of coverage. Proposed drawing revisions have been submitted in Figs. 12-14 to overcome the objection raised by the Examiner. The title has been changed to "OPTICAL MICROCANTILEVER" to more clearly reflect the invention to which the claims are directed. A new, more descriptive abstract has been substituted for the original abstract.

In view of the foregoing, applicants respectfully submit that the objection to the drawings and claims 3-4 have been overcome and should be withdrawn.